(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 330 060 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
12.05.2004 Bulletin 2004/20

(43) Date of publication A2:
23.07.2003 Bulletin 2003/30

(21) Application number: **02258962.6**

(22) Date of filing: **24.12.2002**

(51) Int Cl.[7]: **H04J 3/14**, H04J 14/02, H04L 12/24

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SI SK TR
Designated Extension States:
AL LT LV MK RO

(30) Priority: **26.12.2001 US 34443**

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(54) Service protection method and apparatus for TDM or WDM communications networks

(57) Service path protection is provided for packet-based data services (e.g. GbE or FC) by making available to a protected service, as and when needed, pre-emptable (i.e. sharable) transport bandwidth (e.g. STS-1s for a SONET network) used, under normal conditions, to transport other data services. Each client-based service path is defined by a selectable working path when service protection has not been initiated for that service path and each working path comprises a selectable bandwidth, selectable portions of which are designated as unpre-emptable and/or pre-imputable, whereby the pre-emptable bandwidth portions are made available for protection pre-emption by different service paths. A protection path is assigned to each protected service path, whereby each protection path comprises a selectable bandwidth having pre-emptable bandwidth portion(s) of working path(s) defining different service path(s) and/or unused network bandwidth. In response to a protection switch request the protected service path is switched so that it is defined by the protection path assigned to it, thereby preempting the pre-emptable bandwidth portion of the protection path for use by the protected service path. The working path bandwidths are selected on a dynamic basis in response to available network bandwidth so as to maximise the use of network bandwidth by the working paths.

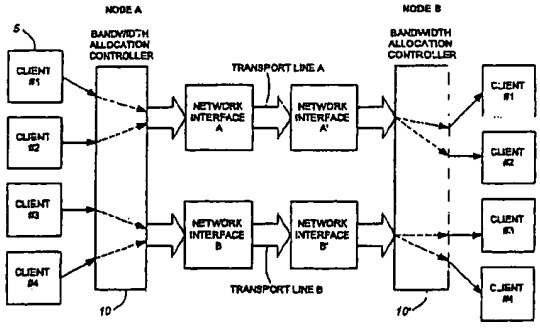

FIG. 1A

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EUROPEAN SEARCH REPORT

Application Number
EP 02 25 8962

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
MUNICH	18 March 2004	Belloni, P

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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